

In the Specification:

Please **replace** the paragraph at **page 1, lines 7 to 12**, with a replacement paragraph amended as follows:

A ZnSe crystal is a direct transition type semiconductor having forbidden bandwidth (band gap energy) of 2.7 eV at ~~[[a]]~~ room temperature, expected to have a wide range of applications for a light emitting device in the wavelength range of blue to green. Particularly after 1990, when it was found that a p-type ZnSe film could be formed by doping plasma-excited nitrogen, ZnSe type light emitting devices have been attracting attention.

Please **replace** the paragraph at **page 11, line 28 to page 12, line 15**, with a replacement paragraph amended as follows:

Next, a method of manufacturing the light emitting device in accordance with the present embodiment will be described. First, by the MBE method, the stacked structure shown in Fig. 1 was formed on a conductive ZnSe substrate having the plane orientation of (100). As to the composition ratio of n-type and p-type cladding layers, a composition that realizes the band gap of 2.9 eV at ~~[[a]]~~ room temperature and attains substantial lattice matching with the ZnSe substrate was adopted. As the barrier layer, a ZnMgBeSe layer having the band gap of 3.1 eV (room temperature) and thickness of 20 nm and also substantially lattice-matched with the ZnSe substrate was used. Here, n-type ZnMgSSe layer 3, barrier layer ~~[[b]]~~ (first cladding

layer) 11 and p-type ZnMgSSe layer (second cladding layer) 5 require Mg of different compositions, respectively, and therefore, different Mg fluxes are required during growth. Therefore, a plurality of K cells may be used as an Mg source. In the present embodiment, however, a single K ~~[[sell]]~~ cell is used, and the temperature of the K cell for Mg was changed during the growth. Therefore, before the growth of barrier layer 11 and p-type ZnMgSSe layer 5, the temperature of the K cell for Mg was changed, and the growth was interrupted until the temperature became stable.

Please **replace** the paragraph at **page 16, lines 1 to 11**, with a replacement paragraph amended as follows:

Fig. 8 shows an energy band of the portion including n-type cladding layer 3/active layer 4/barrier layer 11/trap layer 12/p-type cladding layer 5 of the LED shown in Fig. 7. Because of such an energy band structure, electrons going from the active layer to the p-type cladding layer are first prevented by the potential of barrier layer 11. Most of the electrons that leaked over the barrier layer 11, however, are trapped by the defects in trap layer 12, recombined with the holes and disappear. Therefore, trap layer 12 serves as a sink. Consequently, the number of electrons that can reach the p-type cladding layer is significantly reduced. The band gap of trap layer 12 ~~[[have]]~~ only needs to be larger than that of the p-type cladding layer, and it is unnecessary to set the band gap

to be the same as a larger one of the layers in the active layer that generally includes a plurality of layers.

Please **replace** the paragraph at **page 17, lines 6 to 14**, with a replacement paragraph amended as follows:

Fig. 10 shows an LED (Light Emitting Diode) as a semiconductor light emitting device in accordance with a third embodiment of the present invention. For fabricating the LED as an example of the present invention, an n-type ZnSe substrate 1 having the plane orientation of (100) was used. On the n-type ZnSe substrate 1, an n-type ZnSe film 2 as a buffer layer/an n-type ZnMgSSe layer 3 as an n-type cladding layer/~~ZnCdSe/ZnSe~~ layer/(ZnCd/ZnSe multiquantum well) 4 as an active ~~layer/an ZnMgBeSe~~ layer/a ZnMgBeSe layer 11 as a barrier layer/a ZnCdS layer 5 as a p-type cladding layer/(ZnTe/ZnSe superlattice layer/p-type ZnSe layer) 6, 7 as a contact layer are epitaxially formed in this order from the lower side.

Please **replace** the paragraph at **page 19, lines 8 to 22**, with a replacement paragraph amended as follows:

Referring to Fig. 14, in a semiconductor light emitting device 10 in accordance with the present embodiment, on an n-type ZnSe substrate 1, an n-type ZnSe layer as a buffer layer 2, an undoped ZnMgSSe layer as an undoped cladding layer 3, an active layer 4 having a multiquantum well structure of ~~ZnCdSe/ZnSe~~, ZnCd/ZnSe, a p-type ZnMgSSe layer as a p-type cladding layer 5, and a

contact layer 6, 7 having a multiquantum well structure of ZnTe/ZnSe and a p-type ZnSe layer are stacked in this order from the lower side. Two cladding layers 3 and 5 sandwich active layer 4. Here, cladding layer 3 positioned below active layer 4, that is, on the side of ZnSe substrate 1 is the undoped ZnMgSSe layer, while cladding layer 5 positioned above the active layer, that is, positioned farther away from the active layer when viewed from the ZnSe substrate is the p-type ZnMgSSe layer. In the following description, the undoped cladding layer positioned below the active layer may be referred to as an n-electrode side cladding layer, and the p-type cladding layer positioned above the active layer may be referred to as a p-electrode side cladding layer. Further, cladding layers of the conventional light emitting device shown in Fig. 19 may be referred to in the similar manner.

Please **replace** the paragraph at **page 22, lines 3 to 11**, with a replacement paragraph amended as follows:

In view of the foregoing, an approach has been found in which the p-type cladding layer is doped with a p-type impurity in the conventional manner so that it comes to have p-type conductivity, while the n-electrode side cladding layer is undoped. By this approach, introduction of electrons to the active layer is hindered, that is, electrons are less accumulated, and the Fermi level ϕ_n in the active layer lowers. There was a concern that if the n-electrode side cladding layer were undoped and made to

have high electric resistance, current would not flow through the light emitting device. It was found by actual experimental prototype that electrons diffused from the n-type buffer layer 2 to n-electrode side cladding layer 3 and the current ~~[[flew.]]~~ flowed.

[RESPONSE CONTINUES ON NEXT PAGE]